

media with accompanying printed or electronic documentation, e.g., shrink wrapped software, preloaded with a computer system, e.g., on system ROM or fixed disk, or distributed from a server or electronic bulletin board over a network, e.g., the Internet or World Wide Web.

5 Although various exemplary embodiments of the invention have been disclosed, it will be apparent to those skilled in the art that various changes and modifications can be made which will achieve some of the advantages of the invention without departing from the spirit and scope of the invention. Further, many of the system components described herein have been described using products from Lotus Development

10 Corporation. It will be obvious to those reasonably skilled in the art that other components performing the same functions may be suitably substituted. Further, the methods of the invention may be achieved in either all software implementations, using the appropriate processor instructions, or in hybrid implementations which utilize a combination of hardware logic and software logic to achieve the same results. Such

15 modifications to the inventive concept are intended to be covered by the appended claims.

What is claimed is:

1 1. In a computer system having a user interface capable of displaying a plurality of
2 data items and receiving user commands, a method comprising:
3 (a) receiving, through the user interface, a command to swap a first displayed
4 data item with a second displayed data item;
5 (b) obtaining data identifying the first displayed data item;
6 (c) determining the identity of the second displayed data item; and
7 (d) swapping the first displayed data item with the second displayed data
8 item.

1 2. The method of claim 1 wherein the first displayed data item and the second
2 displayed data item are displayed adjacent on the user interface and wherein step (c)
3 further comprises:

4 (c.1) receiving, through the user interface, a directional command identifying a
5 relative direction of a position of the second displayed data item to a position of the first
6 displayed data item.

1 3. The method of claim 2 wherein the directional command comprises one of up,
2 down, left and right directional commands.

1 4. The method of claim 1 wherein step (d) further comprises:

2 (d.1) determining whether the first displayed data item and the second
3 displayed data item have similar respective data types.

1 5. The method of claim 1 wherein step (c) further comprises:

2 (c.1) receiving data defining a position of a selection icon relative to the first
3 displayed data item.

1 6. The method of claim 1 wherein step (c) further comprises:
2 (c.1) receiving data defining a position of a selection icon relative to the second
3 displayed data item.

1 7. In a computer system having a user interface capable of displaying a plurality of
2 data items and receiving user commands, a method comprising:

3 (a) receiving, through the user interface, a command to swap a first plurality
4 of displayed data items with a second plurality of displayed data items;
5 (b) obtaining data identifying the first plurality of displayed data items;
6 (c) determining the identity of the second plurality of displayed data items;
7 and
8 (d) swapping the first plurality of displayed data items with the second plurality
9 of displayed data items.

1 8. A computer program product for use with a computer system having a user
2 interface capable of displaying a plurality of data items and receiving user commands,
3 the computer program product comprising a computer useable medium having
4 embodied therein program code comprising:

5 A. program code for receiving, through the user interface, a command to
6 swap a first displayed data item with a second displayed data item;
7 B. program code for obtaining data identifying the first displayed data item;
8 C. program code for determining the identity of the second displayed data
9 item; and
10 D. program code for swapping the first displayed data item with the second
11 displayed data item.

1 9. The computer program product of claim 8 wherein the first displayed data item
2 and the second displayed data item are displayed adjacent on the user interface and
3 wherein the program code for determining the identity the second displayed data item
4 further comprises:

5 (C.1) program code for receiving, through the user interface, a directional
6 command identifying a relative direction of a position of the second displayed data item
7 to a position of the first displayed data item.

1 10. The computer program product of claim 8 wherein the program code for
2 swapping further comprises:

3 (D.1) program code for determining whether the first displayed data item and
4 the second displayed data item have similar respective data types.

1 11. The computer program product of claim 8 wherein the program code for
2 determining the identity of the first displayed data item further comprises:

3 (C.1) program code for receiving data defining a position of a selection icon
4 relative to the first displayed data item.

1 12. The computer program product of claim 8 wherein the program code for
2 determining the identity of the second displayed data item further comprises:

3 (C.1) program code for receiving data defining a position of a selection icon
4 relative to the second displayed data item.

1 13. A computer program product for use with a computer system having a user
2 interface capable of displaying a plurality of data items and receiving user commands,
3 the computer program product comprising a computer useable medium having
4 embodied therein program code comprising:

- 5 A. program code for receiving through the user interface, a command to
- 6 swap the first plurality of displayed data items with the second plurality of
- 7 displayed data items;
- 8 B. program code for obtain data identifying the first plurality of displayed data
- 9 items;
- 10 C. program code for determining the identity of a second plurality of
- 11 displayed data items; and
- 12 D. program code for swapping the first plurality of displayed data items with
- 13 the second displayed data items.

1 14. An apparatus for use with a computer system having a user interface capable of
2 displaying a plurality of data items and receiving user commands, the apparatus
3 comprising:

- 4 A. program logic configured to receive, through the user interface, command
5 to swap a first displayed data item with a second displayed data item;
- 6 B. program logic configured to obtain data identifying the first displayed data;
- 7 C. program logic configured to determine the identity of the second
8 displayed data item; and
- 9 D. program logic configured to swap the first displayed data item with the
10 second displayed data item.

1 15. The apparatus of claim 14 wherein the first displayed data item and the second
2 displayed data item are displayed adjacent on the user interface and wherein the
3 program logic configured to determine the identity of the second displayed data item
4 further comprises:

5 (C.1) program logic configured to receive, through the user interface, a
6 directional command identifying a relative direction of a position of the second displayed
7 data item to a position of the first displayed data item.

1 16. The apparatus of claim 14 wherein the program logic configured to swap further
2 comprises:

3 (D.1) program logic configured to determine whether the first displayed data
4 item and the second displayed data item have similar respective data types.

1 17. The apparatus of claim 14 wherein the program logic configured to determine the
2 identity of the second displayed data item further comprises:

(C.1) program logic configured to receive data defining a position of a selection icon relative to the second displayed data item.

1 18. The apparatus of claim 14 wherein the program logic configured to determine the
2 identity of the second displayed data item further comprises:

(C.1) program logic configured to receive data defining a position of a selection icon relative to the second displayed data item.

1 19. An apparatus for use with a computer system having a user interface capable of
2 displaying a plurality of data items and receiving user commands, the apparatus
3 comprising:

4 A. program logic configured to receive, through the user interface, one or
5 more commands to swap a first plurality of displayed data items with a
6 second plurality of displayed data items;

9 E. program logic configured to determine the identity of the second plurality
10 of displayed data items; and
11 F. program logic configured to swap the first plurality of displayed data items
12 with the second plurality of displayed data items.